



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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**OFFICE OF
ENVIRONMENTAL
CLEANUP**

MEMORANDUM

DATE: August 18, 2016

SUBJECT: Crawford Street Corporation
Supplemental Bank Erodible Soil Assessment Plan
Source Control Evaluation
ECSI #2363
July 6, 2016

FROM: Eva DeMaria, Remedial Project Manager *EDM*

TO: Jim Orr, Project Manager
Oregon Department of Environmental Quality

Following are the United States Environmental Protection Agency's (EPA's) comments on the July 2016 Supplemental Bank Erodible Soil Assessment (SBESA) Plan Source Control Evaluation (SCE) Crawford Street, Portland, Oregon. Bridgewater Group, Inc. prepared the assessment plan on behalf of Crawford Street Corporation. The Crawford Street property is located at 8424 North Crawford Street in Portland, Oregon and listed in Oregon Department of Environmental Quality's (ODEQ's) cleanup program as ECSI #2363. The Crawford Street property is located upland of river mile 6 east (RM6E).

EPA understands that the purpose of the SBESA plan is to generate data to support an SCE. The purpose of EPA's review is to understand the work that is planned and to identify if the work appears to omit collection of data needed for SCE.

EPA's comments are presented in the following sections. Comments are separated as: "Primary," which identify concerns that must be resolved to achieve the assessment's objective; "To Be Considered," which, if addressed or resolved, would reduce uncertainty, improve confidence in the document's conclusions, and/or best support the assessment's objectives; and "Matters of Style," which substantially or adversely affect the presentation or understanding of the technical information provided in the report.

Primary

1. The method for determining the Near Bank Stress (NBS) parameters, which will be used in the Bank Assessment for Non-Point Source Consequence of Sediment (BANCS) model should be described in the work plan. For example, the work plan should describe how velocity profiles and velocity gradients will be determined for each section of the riverbank. The work plan should also describe how waves generated from boat wake and wind will be evaluated in assessing NBS.
2. Soil samples should be analyzed for total petroleum hydrocarbons (TPH), which were detected in previous river bank surface soil samples.
3. The SBESA should be revised to include more information on work procedures; historical data; description of property characteristics such as armoring of the shoreline, current and future

property use, and historical uses; and other general elements of a work plan. Generally, the SBESA plan does not contain much information describing the work procedures that will be performed. For example, it is unclear if the lithology of soil samples will be recorded during the field investigation.

4. The erodible soil assessment relies on the BANCS modeling to identify areas susceptible to erosion; however, the BANCS model does not provide information on erosion of river bank soil due to surface water runoff and overland flow. The SBESA should evaluate if and where overland flow occurs over the river bank and if it has the potential to erode river bank soil.
5. In addition to characterizing areas most likely to erode, the SBESA should evaluate current and previous uses of the property and/or where previous unauthorized releases may have resulted in contamination of river bank soil. For example, an area may be exposed to lower erosional forces but may contain higher concentrations of chemicals of interest (COIs), which could be deposited in the Willamette River.

To Be Considered

1. In areas determined to be susceptible to river bank erosion, subsurface soil samples should be collected to evaluate concentrations of COIs in river bank soil that may erode and be deposited into the river in the future.
2. The footnote at bottom of page 1 regarding use of PRGs and SLVs, should be included in the “Reporting” section to add details of the evaluations and note that laboratory methods need to achieve specific reporting limits to achieve objectives for comparing results to criteria.

Matter of Style

1. Introduction – page 1, the statement “As noted in these documents, only limited and modest Portland Harbor Screening Level Values (SLVs) exceedances were noted in samples collected along portions of the bank identified as being potential erodible” should be revised to clarify the sample locations and ratio for exceedances.
2. Table 2 should be revised to include the preliminary remediation goals for remedial action objectives 5 and 9 listed in Tables 2.2-1c and 2.2-1d of the Portland Harbor Feasibility Study (EPA 2016).

References

2016. EPA. Portland Harbor RI/FS Feasibility Study. June.